

## SYSTEM AND METHOD FOR PASSING HIGH ENERGY PARTICLES THROUGH A MASK

### ABSTRACT

[0039] A method and system is disclosed for concentrating high energy particles on a predetermined area on a target semiconductor substrate. A high energy source for generating a predetermined amount of high energy particles, and an electro-magnetic radiation source for generating low energy beams are used together. The system also uses a mask set having at least one mask with at least one alignment area and at least one mask target area thereon, the mask target area passing more high energy particles than any other area of the mask. At least one protection shield is incorporated in the system for protecting the alignment area from being exposed to the high energy particles, wherein the mask is aligned with the predetermined target semiconductor substrate by passing the low energy beams through the alignment area, wherein the high energy particles generated by the high energy source pass through the mask target area to land on the predetermined area on the target semiconductor substrate.